DWR Climate News Digest

May 3rd, 2013 to June 30th, 2013

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The information provided herein is a selected compilation of recent popular news articles, publications, and other information relevant to climate change and water management. The links provided herein are intended to provide educational and thought-provoking material for water managers and water users.

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TOPICS [Find older items in the Climate News Archive]

Reports

Mid- and End-of-Century Snowfall in the Lost Angeles Region [LARC - June 2013]

- <u>Wealthier, Healthier Cities How Climate Change Action is Giving us Wealthier, Healthier</u>

 <u>Cities</u> [Carbon Disclosure Project June 2013]
- <u>Climate Change Vulnerability Assessment for Natural Resources Management: Toolbox of</u>
 <u>Methods with Case Studies Version 1.0</u> [US Fish and Wildlife Service June 5, 2013]
- <u>Scenario Planning for Climate Change Adaptation A guidance for resource managers</u>

 [Point Blue Conservation Science and the California Coastal Conservancy June 2013]
- <u>Shifting Skies: Migratory Birds in a Warming World Urgent Action Needed to Protect Birds</u> <u>and Their Habitats</u> [National Wildlife Federation - June 18, 2013]
- <u>Southwest Climate Change Assessment Report</u> [University of Arizona May 2013] (this comprehensive report summarizes past, present and future projected climate conditions in the southwestern US; represents the findings of 120 authors from a variety of disciplines)
- <u>Climate in the Parks Innovative Climate Change Education in Parks</u>

 [Parks Conservancy June 2013]
- <u>Climate Change in the American Mind American's Global Warming Beliefs and Attitudes in</u>

 <u>April 2013</u> [Yale Project on Climate Change Communication April 2013]

Published Literature

<u>Climate change, wine and conservation</u> [Conservation - June 21, 2013]

Identifying the world's most climate change vulnerable species: A systematic trait-based assessment of all birds, amphibians and corals [PLOS one - June 12, 2013]

Quantifying the consensus on anthropogenic global warming in the scientific literature

[Environmental Research Letters - May 15, 2013] (nearly 12,000 abstracts were examined to assess the scientific consensus on anthropogenic global warming; results indicate that 'the number of papers rejecting AGW (anthropogenic global warming) is a miniscule proportion of the published research')

Modeling climate change impacts on tidal marsh birds: Restoration and conservation planning in the face of uncertainty [Ecological Society of America - April 2013]

Grants and Other Funding Opportunities

Climate Funding Opportunities [NOAA - June 2013]

California State Coastal Conservancy's Climate Ready Grant Announcement [California Coastal Conservancy - June 13, 2013] (The California State Coastal Conservancy (Conservancy) announces the availability of funding for projects through its Climate Ready program. Climate Ready grants are intended to encourage local governments and non-governmental organizations to act now to prepare for a changing climate by advancing planning and implementation of on-the-ground actions that reduce greenhouse gas emissions and lessen the impacts of climate change on California's coastal communities and natural resources. Grant applications are due August 28, 2013.

A total of \$1,500,000 is available for awards through this competitive grant program. The minimum grant amount is anticipated to be \$50,000. The maximum grant amount is anticipated to be \$200,000. The Conservancy will base the size of the award on each project's needs, its overall benefits, and the extent of competing demands for funds.

Climate Ready grants can support a wide range of activities including vulnerability assessments, development and implementation of adaptation strategies, science-based scenario planning, and demonstration projects that help inform others about successful and cost-effective adaptation strategies. Successful applications will maximize public benefits to the coast while reducing greenhouse gas emissions, reducing hazards that threaten coastal communities or public infrastructure, preserving and enhancing coastal wetlands and other natural lands, conserving biodiversity and providing recreational opportunities that support greenhouse gas reduction goals.)

Sea-level Rise and other Ocean Impacts

What President Obama's climate plan means for the ocean

[American Progress - June 26, 2013]

Warm ocean drives most Antarctic ice shelf loss [Science Daily - June 13, 2013]

<u>Is more global warming hiding in the oceans?</u> [US News - May 29, 2013]

Warming oceans are reshaping fisheries [Pew Environment - May 15, 2013]

[video] Making Waves [NOAA - May 2, 2013] ("In this video podcast, learn what ocean acidification is, how it's affecting marine life, and how NOAA tools are helping people monitor and adapt to changes in ocean chemistry")

Agriculture/Food Production

Cheap food is a think of the past, report warns [Climate Progress - June 10, 2013]

Americans throw out 40 percent of their food, which is terrible for the climate [Climate Progress - June 5, 2013]

Food supply under assault as climate heats up [NBC news - May 16, 2013]

General Water Management

<u>Satellite data will be essential to future of groundwater, flood and drought management</u> [Science Daily - June 13, 2013]

U.S. tailors regional climate plans to help farmers beat the heat [Bloomberg - June 5, 2013]

Water/Energy Nexus

Nanoparticle opens the door to clean-energy alternatives [Penn State - June 13, 2013]

<u>Floods</u>

Thousands flee as record floods inundate Central Europe [Climate Progress - June 4, 2013]

Drought

Drought is causing U.S. beef prices to skyrocket [Climate Progress - June 13, 2013]

<u>James Hansen is correct about catastrophic projections for U.S. drought if we don't act now</u>
[Climate Progress - May 13, 2012]

NASA projects carbon pollution impact: 'Some regions outside the tropics may have to rainfall at all' [Climate Progress - May 3, 2013]

California Drought 2013: January, February were driest on record

[Huffington Post - May 1, 2013]

Human Health Impacts

Climate change linked to more pollen, allergies, asthma [USA Today - May 31, 2013]

Wildlife and Ecosystem Impacts

Alpine lakes in Austria reflect climate change [National Geographic - June 30, 2013]

<u>Climate change may radically transform desert bacteria</u> [Yahoo -June 28, 2013] (cryptobiotic soils are important for anchoring desert soils to prevent erosion and play a key role in carbon and nitrogen cycling)

Surprise species at risk from climate change [Science Daily - June 24, 2013] ("Up to 83% of birds, 66% of amphibians and 70% of corals that were identified as highly vulnerable to the impacts of climate change are not currently considered threatened with extinction...if we simply carry on with conservation without taking climate change into account, we'll fail to help many of the species and areas that need it most")

Birds highly threatened by climate change, report warns [Think Progress - June 24, 2013]

Large-scale biodiversity is vital to maintain ecosystem health [Science Daily - June 7, 2013]

<u>Drought, river fragmentation forcing endangered fish out of water, biologist finds</u>
[Science Daily - June 6, 2013]

<u>Effects of interannual climate variability on tropical tree cover: Satellite data reveal how</u>
<u>tropical ecosystems may respond to climate extremes</u> [Science Daily - June 2, 2013]

Climate change threatens 82% of native California fish [USA Today - June 1, 2013]

Elevated carbon dioxide making arid regions greener [Science Daily - May 31, 2013]

Climate change will cause widespread global-scale loss of common plants and animals

[Science Daily - May 12, 2013] ("More than half of common plants and one third of the animals could see dramatic decline this century due to climate change...but acting quickly to mitigate could reduce losses by 60% and buy an additional 40 years for species to adapt")

<u>Painted turtles set to become all-female</u> [New Scientist - May 3, 2013] ("A temperature of around 1 degree C is all it would take for the species to become 100% female and earmarked for extinction")

Greenhouse Gas Mitigation

National assessment of geologic carbon dioxide storage resources - summary
[USGS - June 26, 2013]

<u>Farming carbon: Study reveals potent carbon-storage potential of human-made wetlands</u>

[Science Daily - June 20, 2013]

<u>Iron fertilization, process of putting iron into the ocean to help capture carbon, could backfire</u> [Science Daily - June 12, 2013]

Airlines agree on plan to offset emissions [Reuters - June 3, 2013]

<u>Land-based carbon offsets: False hope? Forest and soil carbon is important, but does not</u>
<u>offset fossil fuel emissions</u> [Science Daily - May 30, 2013]

Energy efficiency can make billions while fighting climate change

[Triple Pundit - May 28, 2013] ("As much as 75% of the electricity used in the U.S. today could be saved with efficiency measures that cost less than the electricity itself")

International Planning

Climate change policy in America, Europe, and China [Business Insider - June 29, 2013]

Beyond NYC: Other places adapt to climate, too [Yahoo - June 16, 2013]

The inequality of climate change [Independent - June 3, 2013]

Africa: Climate change and economic development [All Africa - May 31, 2013]

Global climate change fears are genuine [Guatemala Times - May 31, 2013]

Pacific islands look for model to combat changes due to global warming

[Guardian - May 7, 2013]

Climate Change Modeling

Mapping sea salt from orbit: Building better ocean and climate models

[Science Daily - May 31, 2013]

Study finds warming in central China far greater than most climate models indicated

[Climate Progress - May 15, 2013]

BLOGS/Commentary

Joe Romm on "Invest, Divest: Obama goes full climate hawk in speech unveiling plan to cut carbon pollution' [Climate Progress - June 25, 2013]

Andrew Freedman on "Breaking down key features of Obama's climate plan"

[Climate Central - June 25, 2013]

dana1981 on "Media overlooking 90% of global warming" [Skeptical Science - June 25, 2013]

Robert Wilson on "Can we solve climate change through carbon capture and storage?"

[The Energy Collective - May 28, 2013]

Cara Pike on "Climate resilience: Deconstructing the new buzz word"
[Climate Progress - May 13, 2013]

James Hansen on "Game over for the climate" [New York Times - May 9, 2013]

Maven's Notebook on "California water policy seminar series presents Mark Cowin: "What's so funny 'bout peace, love, and understanding?" [Maven's Notebook - April 4, 2013]

<u>Additional Items of Interest</u>

California's Sierra a 'living lab' for climate change [Newsday - July 1, 2013]

President Obama's plan to fight climate change [White House - June 25, 2013]

[website] EcoAtlas [San Francisco Estuary Institute - June 2013]

<u>Changing minds about climate change policy can be done - sometimes</u> [PhysOrg - June 24, 2013]

[website] <u>AQUAPEDIA</u> [Water Education Foundation - 2013] (this online water encyclopedia "provides easy-to-use, easy-to-understand factual information on topical water issues from the Sacramento-San Joaquin Delta to the Salton Sea to the possible impacts of climate change and rising seas")

350+ small businesses sign climate declaration in call for U.S. climate change policy [Ceres - June 20, 2013]

Global warming appears to have slowed lately. That's no reason to celebrate

[Washington Post - June 14, 2013]

A stronger, more resilient New York [New York City - June 11, 2013]

Four energy policies can keep the 2 degree C climate goal alive

[International Energy Agency - June 10, 2013]

After release of report, UN climate change official reiterates now is 'crucial moment' to act

[United Nations - June 10, 2013]

What is the global warming impact of switching coal power to natural gas?

[Climate Central - June 2013] (explore scenarios of coal-to-gas conversion with this tool)

An economist's dire warning about global warming [IT World - June 3, 2013]

Climate change's psychological milestone [Slate - June 2, 2013] ("Atmospheric scientist Ralph Keeling, director of the CO2 program at Scripps Institute of Oceanography in La Jolla, CA, explains the importance of measuring a CO2 concentration of 400 parts per million at the observatory that his father, Charles Keeling, set up")

Women are the true face of climate change: Poor women around the globe will be affected

[Living Green Magazine - May 31, 2013]

Qing-Bin Lu revives debunked claims about cosmic rays and CFCs

[Climate Science Watch - May 31, 2013]

Global warming caused by CFCs, not carbon dioxide, researcher claims in controversial study

[Science Daily - May 30, 2013]

Republican senator praises solar, warns of human-caused climate change

[Green Tech Media - May 30, 2013]

CBS News ties extreme weather to manmade climate change

[Climate Progress - May 28, 2013]

California's vanishing glaciers: A defining moment [KQED - May 27, 2013]

Governor Brown joins global scientists to call for action on climate change

[Office of the Governor - May 23, 2013]

A rough guide to the jet stream: what it is, how it works and how it is responding to enhanced Arctic warming [Skeptical Science - May 22, 2013]

Two-month time-lapse video of Antarctic ice goes viral

[National Science Foundation - May 16, 2013]

<u>Scientific consensus on anthropogenic climate change</u> [Science Daily - May 15, 2013]

Pedal to the metal: Three recommendations for the new U.S.-China climate change working group [Huffington Post - May 15, 2013]

<u>Emotional response to climate change influences whether we seek or avoid further</u> <u>information</u> [Eurekalert - May 15, 2013]

Climate change may be baring Mount Everest [LA Times - May 14, 2013]

Amid rapid Arctic warming, U.S. releases new strategy [Climate Central - May 14, 2013]

For insurers, no doubts on climate change [New York Times - May 14, 2013]

Zoomable climate change time-lapse of entire earth over 30 years

[America Blog - May 13, 2013]

Scientists use crowd-sourcing to help map global CO2 emissions

[Arizona State University - May 13, 2013]

Scientists find extensive glacial retreat in Mount Everest region [Science Daily - May 13, 2013]

Heat-trapping gas passes milestone, raising fears [New York Times - May 10, 2013]

<u>Climate record from bottom of Russian lake shows Arctic was warmer millions of years ago</u>

[National Science Foundation - May 9, 2013] ("...Earth's climate sensitivity to carbon dioxide may well be higher than suggested by the 2007 report of the Intergovernmental Panel on Climate Change")

<u>Urban trees store carbon enhance the environment, provide economic benefits</u>

[USDA - May 9, 2013]

Climate record from bottom of Russian lake shows Arctic was warmer millions of year ago

[National Science Foundation - May 9, 2013]

NASA study projects warming-driven changes in global rainfall [NASA - May 3, 2013] ("This study shows for the first time how rising carbon dioxide concentrations could affect the entire range of rainfall types on Earth")

The Antarctic's ice paradox [PBS - May 1, 2013]

Joint U.S. - China Statement on Climate Change [US Department of State - April 13, 2013] ("The United States and the People's Republic of China recognize that the increasing dangers presented by climate change measured against the inadequacy of global response requires a more focused and urgent initiative...both sides consider that the overwhelming scientific consensus regarding climate change constitutes a compelling call to action crucial to having a global impacts on climate change")

Images to Ponder

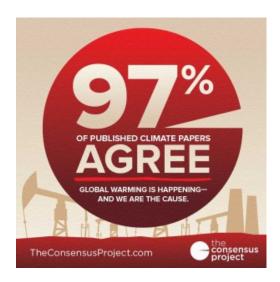
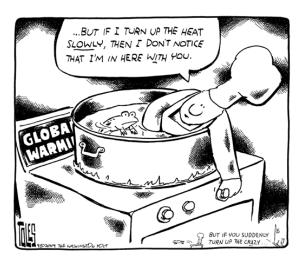


Image credit: http://thinkprogress.org/climate/2013/05/15/2014211/study-finds-97-consensus-on-human-caused-globalwarming-in-the-peer-reviewed-literature/



<u>Image credit:</u> http://thinkprogress.org/climate/2013/06/02/1931301/humans-are-not-like-slowly-boiling-frogs-we-are

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